for the existing soundwall. However, under Alternatives 2 and 3 (without the design option that avoids relocation), sections of the existing soundwall would need to be removed, relocated, and replaced in-kind along the project alignment with Soundwalls S1116, S1132, and S1142 where space is needed for the proposed project's additional lanes and required safety features.

In-kind soundwalls would be reconstructed to match the existing structure as much as possible, which would include the style of the soundwall and the physical dimensions, such as height and length. Specifications of soundwalls throughout the project would become available when the design has been finalized.

Typically, soundwalls are planned to be constructed at early phases of the project when it is possible to provide construction noise mitigation measures; however, it may not be possible to construct the replacement soundwall without first removing the existing soundwall due to space limitations. Therefore, there may be a period of time where no abatement of traffic noise will occur until the replacement soundwall is constructed. During the final design when details of the construction activities become available, noise levels will be calculated and appropriate mitigation measures will be identified. This information will be included in the Noise and Vibration Construction Monitoring and Mitigation Plan. Please also see Responses to Comments GL14-308 and GL14-309 regarding construction scheduling and noise mitigation.

Extending the height of the existing soundwall along Almond Avenue would have limited effects for the adjacent residential areas. Soundwalls have a "diminishing margin of return" once the line-of-sight to major sources of traffic noise have been cut or blocked, which include, but are not limited to, tire, engine, and truck stack exhaust noise. The insertion loss for barriers does not follow a linear trend in reducing noise levels once the line-of-sight is removed from the tallest noise source, which for traffic noise is the exhaust from truck stacks, which are approximately 12 ft from ground level. Even if the existing soundwall could be replaced with a wall taller than the original, the insertion loss would still be less than the required 5-dB insertion needed to attain acoustic feasibility according to Caltrans' Traffic Noise Analysis Protocol. In fact, adding 12 ft in height to the existing 18-ft-tall soundwall would still not lower noise levels by an additional 5 dB.

Please also see Common Response – Almond Avenue Soundwall.

Comment GL14-316

Please see Common Response – Insufficient Environmental Document/Mitigation Measures.

Response to Comment Letter GL15

Comment GL15-1

Caltrans and OCTA thank the City of Seal Beach for participating in the environmental process for the I-405 Improvement Project. The City's comments were considered during identification of the Preferred Alternative as described in the Final EIR/EIS. The City will be notified when the Final EIR/EIS is available for review.

Caltrans and OCTA appreciate the City's concerns outlined in your letter and have provided responses addressing these concerns (please see Responses to Comments GL14-1 through GL14-316 above and Common Responses – Preferred Alternative Identification, Almond Avenue Soundwall, Relocation of Gas Lines, Opposition to Tolling, Traffic Bottleneck at the Orange County/Los Angeles County Line, Air Quality, and Health Risks).

Comment GL15-2

As described in Section 2.2.7, Alternatives Considered but Eliminated from Further Discussion, alternatives that did not meet the project purpose, including Alternative 4 and the TSM/TDM Alternative, were removed from consideration. These alternatives are not viable and are not fully analyzed in the EIR/EIS. This section explains each of those alternatives and why it was eliminated. As stated on EIR/EIS page 2-37, all elements of Alternative 4 are included in Alternatives 1, 2, and 3. As stated on EIR/EIS page 2-50, although TSM/TDM measures alone could not satisfy the project's stated purpose and need, TSM/TDM components have been included in the proposed build alternatives and are described in Section 2.2.1, Common Design Features of the Build Alternatives.

Comment GL15-3

Caltrans, as assigned by FHWA, has prepared this joint Draft EIR/EIS, in compliance with CEQA and NEPA. Please see Common Response – Insufficient Environmental Document/ Mitigation Measures.

Comment GL15-4

Please see Responses to Comments GL14-1 through GL14-316 above and Common Response – Preferred Alternative Identification.

Response to Comment Letter GL16

Comment GL16-1

Caltrans and OCTA thank the City of Westminster for participating in the environmental process for the I-405 Improvement Project. The City's comments were considered during identification

of the Preferred Alternative as described in the Final EIR/EIS. The City will be notified at the address provided in your comments when the Final EIR/EIS is available for review.

Caltrans design standards prohibit placement of driveways opposite ramp terminals for safety purposes. The reconstruction of driveways shown on sheet L-19 in Appendix P (P1, P2, and P3) considers the limits required to accommodate safe grades to the onsite parking. Additional coordination with the City will be conducted during final design.

Comment GL16-2

Caltrans and OCTA have been able to reduce the ROW requirements and effects on parking at El Torito Restaurant along Goldenwest Street approaching Bolsa Avenue. The street cross-sectional widths have been reduced, similar to existing conditions, which allows a reduction of impacts to the parking lot from 35 to 3 spaces. The project will still affect the planning strip and sidewalk; however, the sidewalk will be reconstructed in-kind. Information in Table 3.1.4-7 in the Final EIR/EIS will be updated to reflect the reduction in effects on parking spaces.

Comment GL16-3

Please see Response to Comment GL4-12.

Comment GL16-4

The proposed improvements at this location are shown on Layout Sheet L-16 in Appendix P (P1, P2, and P3). The proposed improvements provide a direct and continuous ADA-accessible route, which is an improvement from existing conditions. Caltrans/OCTA are open to considering all suggestions that could result in enhanced pedestrian safety.

Comment GL16-5

Parking space impacts at the Westminster Mall have been reduced to zero. Information in Table 3.1.4-7 in the Final EIR/EIS will be updated to reflect the reduction in effects on parking spaces.

Comment GL16-6

Traffic noise studies follow the State and federal guidelines as detailed in Caltrans' Traffic Noise Analysis Protocol, and soundwalls are designed in accordance with the latest Caltrans specifications at the time of the final design. State and federal regulations for the traffic noise impact study and recommended abatement measures must be followed for the proposed project.

Caltrans maintains the soundwalls because they are within the State ROW. Any specific soundwall in need of repairs or maintenance would need to be addressed to Caltrans Maintenance Department directly.

Please see Common Response – Noise/Noise Analysis.

Comment GL16-7

The preference for Alternatives 1 and 2 over Alternative 3 has been noted and will be considered by Caltrans and OCTA during identification of the Preferred Alternative. Please see Common Response – Preferred Alternative Identification.